

## ABSTRACT

### THE EFFECT OF DURATION IMMERSION TIME MENTEGA AVOCADO (*Persea americana* Mill) ON EDIBLE COATING STARCH OF CASSAVA PEEL ON QUALITY DURING STORAGE

By

ULFA MAZIYYATUL HUSNA

This study aims to determine the immersion time that can maintain the quality of mentega avocado (*Persea americana* Mill) during storage at room temperature. The study was arranged in a Completely Randomized Block Design (RCBD) with a single factor using 8 levels of immersion time, T0 (0 minutes (without immersion)), T1 (1 minute), T2 (3 minutes), T3 (5 minutes), T4 (7 minutes), T5 (9 minutes), T6 (11 minutes), and T7 (13 minutes). This study consisted of the process of making cassava peel starch, making *edible coating*, application of *edible coating* on mentega avocado, and observations including weight loss, hardness, vitamin C content, and a color index of avocado butter. The data obtained were analyzed statistically using the Bartlett and Tuckey test and then continued with the ANOVA test and the 5% BNT test. The results showed that the duration of immersion of mentega avocado on *edible coating* of cassava peel starch had a significant effect on weight loss, hardness, vitamin C content, and the color index of mentega avocado. The best treatment T4 (7 minutes) with 15 days of storage had the appearance of the dominant fruit skin color is green with 28.39% black spots, 30.86% wrinkles on the fruit skin, and a slightly soft texture with a hardness value of 0.798 kg/5x10mm, weight loss 0.0777% and color index 85.8704. However, the immersion time of mentega avocado (*Persea americana* Mill) for 7 minutes could not maintain the vitamin C content properly so the final value of vitamin C was 1.7615mg/100g.

Keywords : *edible coating*, cassava peel starch, mentega avocado

## ABSTRAK

### **PENGARUH LAMA PENCELUPAN ALPUKAT MENTEGA (*Persea americana* Mill) PADA *EDIBLE COATING* PATI KULIT SINGKONG TERHADAP KUALITAS SELAMA MASA SIMPAN**

Oleh

**ULFA MAZIYYATUL HUSNA**

Penelitian ini bertujuan untuk menentukan lama pencelupan yang dapat mempertahankan kualitas alpukat mentega (*Persea americana* Mill) selama penyimpanan di suhu ruang. Penelitian disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan faktor tunggal menggunakan 8 taraf lama pencelupan, T0 (0 menit (tanpa pencelupan)), T1 (1 menit), T2 (3 menit), T3 (5 menit), T4 (7 menit), T5 (9 menit), T6 (11 menit), dan T7 (13 menit). Penelitian ini terdiri dari proses pembuatan pati kulit singkong, pembuatan *edible coating*, aplikasi *edible coating* pada buah alpukat mentega, dan pengamatan meliputi susut bobot, kekerasan, kadar vitamin C, dan indeks warna buah alpukat mentega. Data yang diperoleh dianalisis secara statistik dengan menggunakan uji Bartlett dan Tuckey lalu dilanjutkan dengan uji ANOVA dan uji BNT taraf 5%. Hasil penelitian menunjukkan bahwa lama pencelupan buah alpukat mentega pada *edible coating* pati kulit singkong berpengaruh nyata terhadap susut bobot, kekerasan, kadar vitamin C, dan indeks warna buah alpukat mentega. Perlakuan terbaik T4 (7 menit) dengan penyimpanan 15 hari memiliki penampakan warna kulit buah dominan berwarna hijau dengan 28,39% bercak hitam, 30,86% kekeriputan pada kulit buah, dan tekstur sedikit lunak dengan nilai kekerasan 0,798 kg/5x10mm, susut bobot 0,0777% dan indeks warna 85,8704. Namun lama pencelupan buah alpukat mentega (*Persea americana* Mill) selama 7 menit tidak dapat mempertahankan kandungan vitamin C dengan baik sehingga nilai akhir vitamin C 1,7615mg/100g.

Kata kunci : *edible coating*, pati kulit singkong, buah alpukat mentega